

**STUDIES OF THE GYPONINAE:
TWO NEW PRIMITIVE GENERA—COELOGYPONA AND SULCANA**
(HOMOPTERA: CICADELLIDAE)¹

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The two genera described at this time are apparently rare groups and may represent the primitive forms of the *Prairiana* complex. They are both South American groups and probably limited to the tropical areas. Four species are represented, two in each genus, and all are new to science.

These two genera differ from the other genera in the subfamily by the presence of an additional terminal femoral seta. These new genera thus have the setal formula of 2-2-1-1 (Fig. 5) while the other known genera have the formula of 2-2-1 (Fig. 4).

Genus *Sulcana*, n. gen.

Elongate, flat-headed leafhoppers with a flattened crown bearing two elongate median carinae, one either side of median line. Crown variable in length, always blunt, rounded. Eyes small, ocelli on basal third of crown. Crown flattened, almost parallel margined on basal half. Face with a broad, deep furrow extending from apex of crown almost half way to the clypeus. Pronotum distinctly shorter than crown. Forewings long and narrow with regular venation.

Type—species: *Sulcana brevis*, n. sp.

Sulcana carinata, n. sp.
(Figs. 1-3 and 6-12)

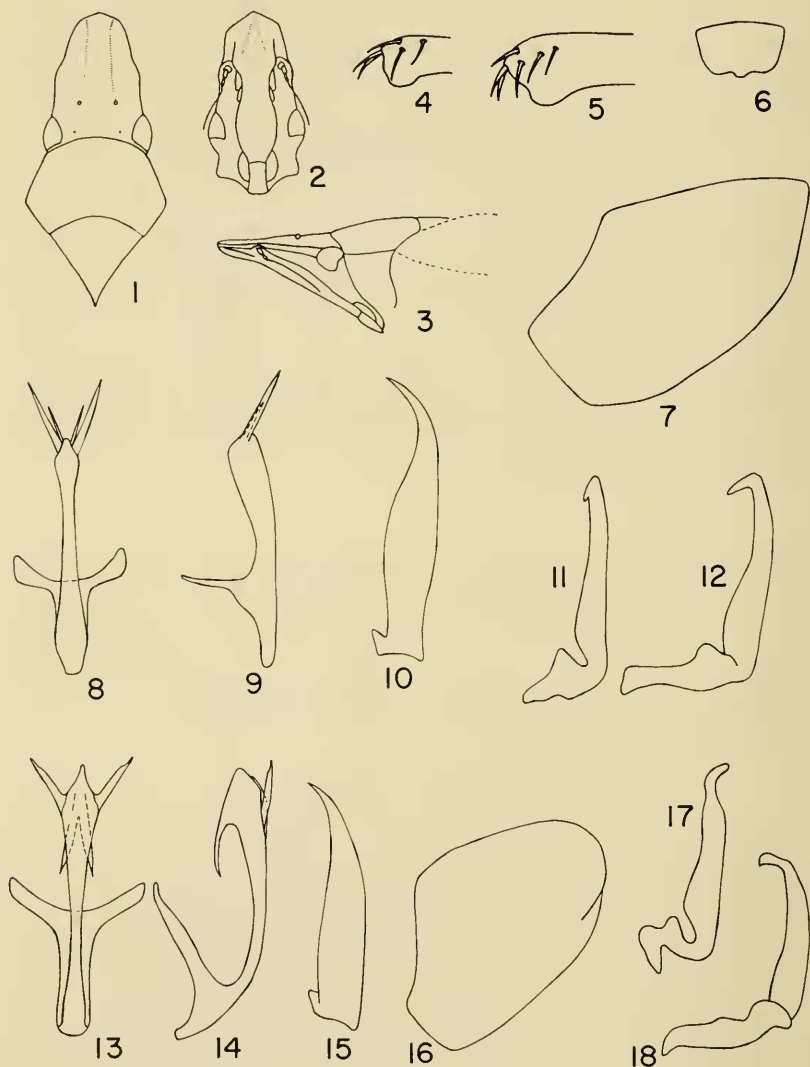
A long narrow species with a long blunt, carinated head. Length of male 11.5 mm., female 14.5 mm.

Crown flat, with a pair of median longitudinal carinae, ocelli on carinae near base; median length nearly twice basal width between eyes, much longer than pronotum. Crown sloping from eyes to a median broad rounded tip which is about half as wide as basal width between the eyes with margin thin and foliaceous. Pronotum distinctly wider than head.

Color.—Buff with darker impressed spots. Forewings buff, subhyaline, veins inconspicuous. Face buff except portion just beneath margin of crown which is pale brown.

Genitalia.—Female seventh sternum with rounded lateral angles, posterior margin gradually sloping to a median slightly produced broad tooth which is about one-sixth the width of the segment. Male plate broad at base, slightly broadened at middle, apical third gradually tapered and curved outwardly forming a narrow, sharp pointed apex. Style narrowed on apical third with apical seventh

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Figs. 1-18. *Sulcana carinata*, n. sp. Fig. 1, dorsal view of head, pronotum, and scutellum; fig. 2, face; fig. 3, lateral view of head and pronotum; fig. 6, ventral view of female ninth sternum; fig. 7, lateral view of male pygofer; fig. 8, ventral view of aedeagus; fig. 9, lateral view of aedeagus; fig. 10, ventral view of plate; fig. 11, ventral view of style; fig. 12, lateral view of style. *Ponana aquila* (Gibson). Fig. 4, tip of hind femur. *Coelogypona venosella*, n. sp. Fig. 5, tip of hind femur. *Sulcana brevis*, n. sp. Fig. 13, ventral view of aedeagus; fig. 14, lateral view of plate; fig. 15, ventral view of plate; fig. 16, lateral view of male pygofer; fig. 17, ventral view of style; fig. 18, lateral view of style.

bent abruptly outward, slightly deflected and tapered to a blunt pointed apex. Aedeagus with shaft narrowed on central half, then enlarged with a tapered apex which bears two pairs of straight spines. Outer pair longer, stout at base, tapered to pointed tips which are about one-third the length of shaft. Inner pair two-thirds as long and much narrower. Pygofer simple with a blunt apex.

Holotype male.—Chapada, Brazil, May, C. F. Baker Collection. Allotype female.—Murtinka, H. Grosso, Brazil, October 1927, A. Maller Coll., Frank Johnson Donor. Both specimens are in the U. S. National Museum Collection.

***Sulcana brevis*, n. sp.**

(Figs. 13–18)

Resembling *carinata* in form and appearance but with a shorter head and different genital structures. Length of male 10.5 mm.

Crown produced and bluntly angled, a little wider between eyes at base than median length. Median longitudinal carinae conspicuous, ocelli near base on outer margin of carinae. Margin thin each side just above antennal sockets. A deep excavation or furrow on face just beneath tip of crown.

Color.—Crown brown to black, the median furrows and other depressions darker, in some places almost black. Pronotum mostly dark brown. Scutellum pale brown with basal and apical angles dark. Forewings brownish subhyaline, veins inconspicuous. Beneath flattened portion of crown and the depression beneath apex, dark brown; other portions of face and clypeus buff to pale brown.

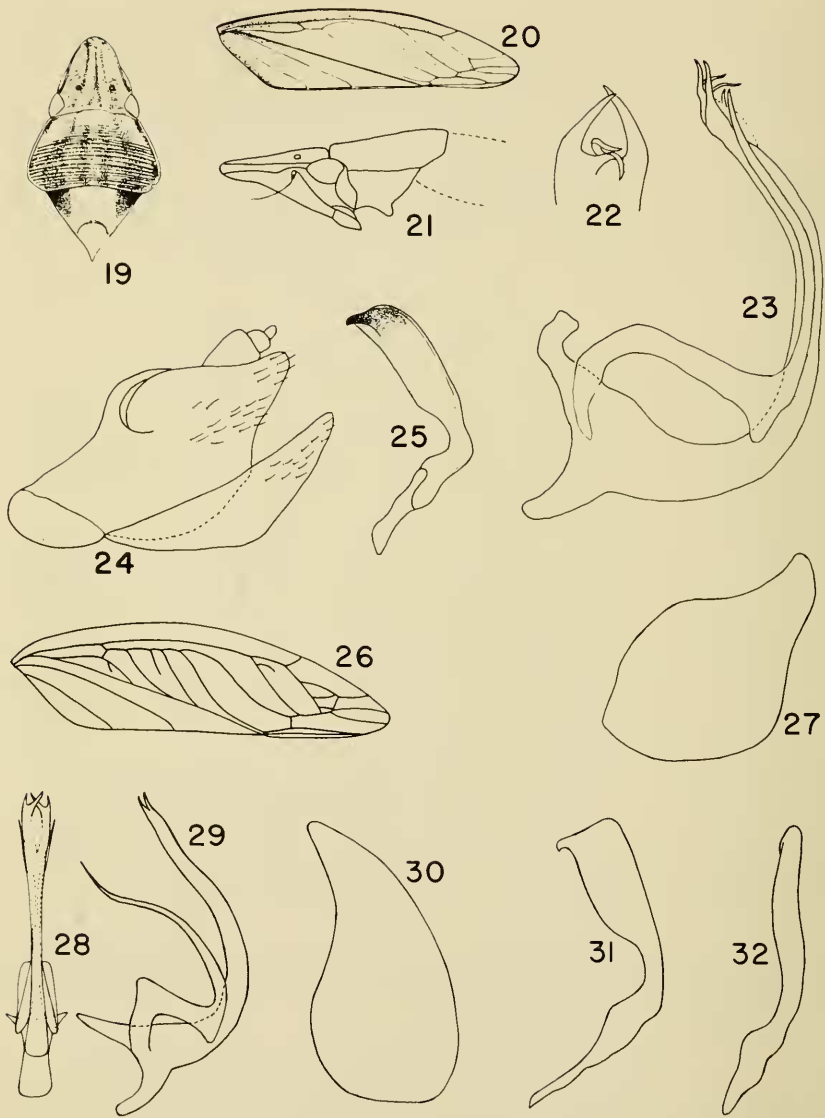
Genitalia.—Male plate narrowed on apical third, curved outwardly and tapered to a narrow pointed apex. Style rather narrow with apical fifth bent abruptly, outwardly narrowed but enlarged at apex producing a broad blunt tip. Aedeagus with a long slender apodeme directed dorsally; shaft slender, apical third enlarged. In lateral view shaft greatly broadened at apex and bearing a pair of bifid spines which are long and narrow, pointed at apex and arising on the dorso-cephalad margin and extending basally. A pair of stout and pointed lateral spines arise on the shaft at the widest portion, as viewed ventrally, and extend lateroapical. Pygofer rounded at apex.

Holotype male.—Chapada, Brazil, Dec., C. F. Baker Collection. Paratype male.—Same data as holotype except April. Both in the U. S. National Museum Collection.

Genus *Coelogypona*, n. gen.

Related to *Sulcana* but without dorsal carinae on crown. The crown is produced, distinctly longer on middle than basal width between the eyes, and slopes from eyes to rounded apex which is less than half as wide as basal width between eyes. Margin thin just above antennal sockets but thicker on median portion. Ocelli on basal portion of crown, not far from eyes, twice as far apart as either is from the proximal eye. Pronotum much broader than head. Forewings narrow and bluntly pointed at apex. Venation highly unusual with subapical veins oblique and at times with extra veinlets and cells.

Type-species: *Coelogypona venosella*, n. sp.



Figs. 19-32. *Coelogypona venosella*, n. sp. Fig. 19, dorsal view of head, pronotum, and scutellum; fig. 20, forewing; fig. 21, lateral view of head and pronotum; fig. 22, tip of aedeagal shaft; fig. 23, lateral view of aedeagus; fig. 24, lateral view of male pygofer, plate, and anal tube; fig. 25, lateral view of style. *Coelogypona venosana*, n. sp. Fig. 26, forewing; fig. 27, lateral view of male pygofer; fig. 28, ventral view of aedeagus; fig. 29, lateral view of aedeagus; fig. 30, central view of plate; fig. 31, lateral view of style; fig. 32, ventral view of style.

***Coelogypona venosella*, n. sp.**

(Figs. 5 and 19-25)

Resembling *venosana* in form and appearance but with different male genital structures. Length of male 17 mm.

Crown produced, margins sloping from eyes to a narrowed rounded apex which is less than half as wide as basal width between the eyes; a little longer than width between the eyes at base. Pronotum slightly longer and much wider than head. Forewings long and with narrow, bluntly pointed apices.

Color.—Buff with reddish peppered markings on crown and pronotum. Forewings orange brown with paler veins. Costal margin yellow. Face yellow; eyes red.

Genitalia.—Male plates broad, narrowed on apical half, the apices blunt, almost rounded and curved outwardly. Style thick, as long as aedeagus, broadened on apical half, apex truncate with a short hooked spine on outer apical margin. Aedeagus with a narrow shaft, gradually broadened on apical third with a prominent apical spine on each outer edge and two shorter medial spines; basal processes long, slender and contiguous with shaft to apex. Pygofer narrow, bluntly angled at apex.

Holotype male.—Achinamiza, Peru, 9-20-27, F 6001, H. Bassler Collection, Acc. 33951, in the American Museum of Natural History. Paratype male.—Huanuco R. Valley, tropical jungle, 500 M.A.S.I., Huanuco, Peru, Feb. 10, 1954, F. L. Woytkowski, in the U. S. National Museum.

***Coelogypona venosana*, n. sp.**

(Figs. 26-32)

Superficially resembling a large pale brownish specimen of *Parabolocratus flavidus* but with ocelli on basal portion of crown and with distinct male genitalia. Length of male 16 mm.

Crown produced, gradually sloping from eyes to a narrow rounded apex which is less than half the basal width between the eyes; longer on middle than basal width between eyes. Pronotum distinctly wider than head and longer than crown. Face gradually sloping from margin of crown to clypeus.

Color.—Buff to pale brown without markings. Forewings pale brownish subhyaline, costal area yellow.

Genitalia.—Male plates broad, narrowed on apical third by the strongly convex inner margin; bluntly pointed apices turned outwardly. Styles thick and as long as aedeagus, apical half broadened and with a short produced hook on outer apical margin of truncate apex. Aedeagus with shaft very slender on median portion, apical fourth broadened and appearing divided with each portion converging at apex and each bearing a pair of apical spines, the inner spine in each case longer. A long slender basal process on each side is as long as the shaft, extending dorsally and tapering to long slender pointed apices. Pygofer bluntly pointed.

Holotype male.—Macas, Oriente, Ecuador, July 1921, J. B. Rorer Coll., in the U. S. National Museum.